



*NOW! Solid color or stripes
from natural color wire...INSTANTLY!*

WIRE CODING INK



BY FORMULABS INDUSTRIAL INKS, INCORPORATED

WIRE CODING INK

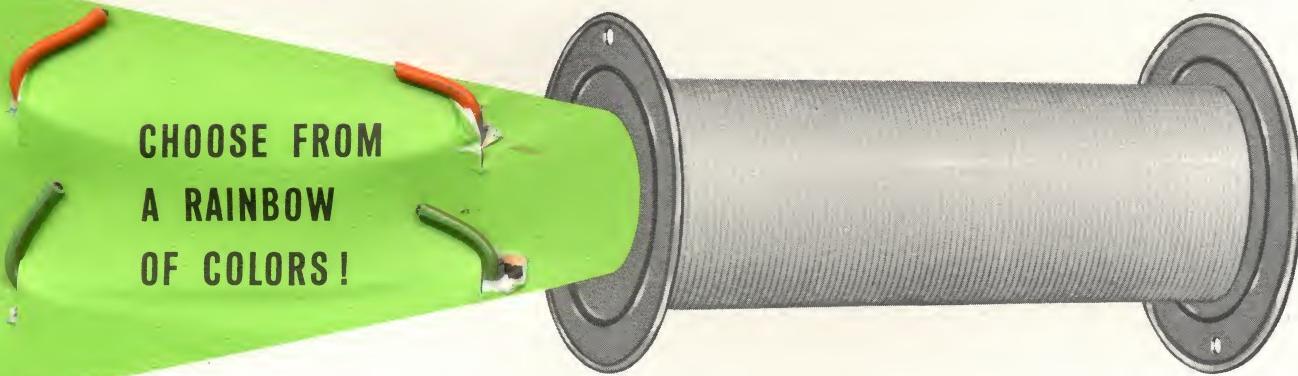
you can make solid color

or striped wire from one spool of natural color

A major breakthrough in the chemistry of color now permits the coding of wire with newly developed inks that are simple to apply, color fast, long-lasting and economical. This ink, developed by Formulabs, is a solution of dye in a special solvent combination. It may be applied to natural colored thermoplastic polyvinyl chloride (PVC) or light colored neoprene wire at rates from 15 to 1000 ft. per minute. No drying tower is necessary.

Electronic, appliance and electrical manufacturers using thermoplastic insulated wire may now confine their stock to natural color only. As required for manufacturing operations, the wire may be color coded in a variety of solid colors or in spiral stripes, direct from the spool, using Formulabs Wire Coding Inks. High speed coloring equipment is available or a portable applicator may be used for pilot runs.

**CHOOSE FROM
A RAINBOW
OF COLORS!**



Formulabs No.

	TCCA Code	
Pink	70017* 70099*	R-71 R-55
Red	70080* 70081 70082*	R-62 R-41 R-63
Orange	70071* 70072*	R-46 R-64
Yellow	70067* 70068*	R-65 R-54

Formulabs No.

	TCCA Code	
Green	70061* 70063* 70065	R-66 R-67 R-45
Turquoise	70022	R-51
Blue	70087 70176*	R-44 R-69
Violet	70056* 70060*	R-70 R-50
Blue-Gray	70142*	R-68

Formulabs No.

	TCCA Code	
Gray	70151* 70153*	R-76 R-77
Tan	70092* 70094*	R-74 R-75
Brown	70141* 70120 70095*	R-73 R-52 R-72
Black		R-53

*Conforms to MIL-STD-104
Samples submitted on request

STRIPED WIRE—Spiral stripes using one, two, three or more of these colors may be applied to natural color wire using wire striping equipment.



WIRE MILL USE

For the wire mill it is no longer necessary to blend and mix pigments into the primary insulation before extruding.

No longer the time consuming change-over from one color to another. Entirely eliminates the arduous tasks of cleaning out tubers and extruders. NO drying tower — NO costly equipment or special area installations. Solid color or stripe *after* extruding!

Inventories may be reduced. Wire may be color-coded to order — small or large quantities.

No large, minimum quantity runs per color.



ADVANTAGES FOR

"ORIGINAL EQUIPMENT MANUFACTURERS"

Reduces inventories. (Stock only natural — color code as needed.)

Saves on inventory investment. No obsolete stock. No minimum quantity order restriction. Enjoy maximum quantity discount by ordering all wire in white or natural color.

Optimum inventory turnover.

Reduces procurement problems and stock control.

PLUS THESE ADDED ADVANTAGES

Formulabs Wire Coding Inks have been approved by UNDERWRITER'S LABORATORIES.

Colors are readily identifiable after exposure to 80°C for 48 hours.

Inks are non-corrosive to stainless steel or aluminum at room temperatures for a period of 1 month minimum.

No measurable effect on dielectric or physical characteristics of thermoplastic (PVC) insulation.

Non-fading. Not subject to atmospheric gas fading.

Can be safely stored in metal containers or safety cans at

room temperatures for eventual transfer to production areas. Pass present-day abrasion and solvent resistance tests.

Prompt deliveries please customers. It is unnecessary to hold up orders for special production runs.

Good penetration is obtained, with *no subsequent sublimation or migration*.

There is no color "pull off."

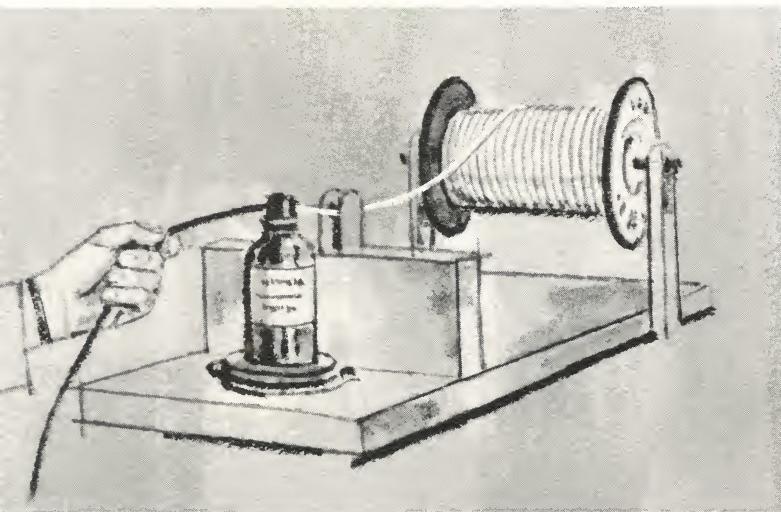
Drying time is less than one second.

Approximate rate of consumption is only 1 oz. per 1000 ft. of wire, much less for striping.

Formulabs

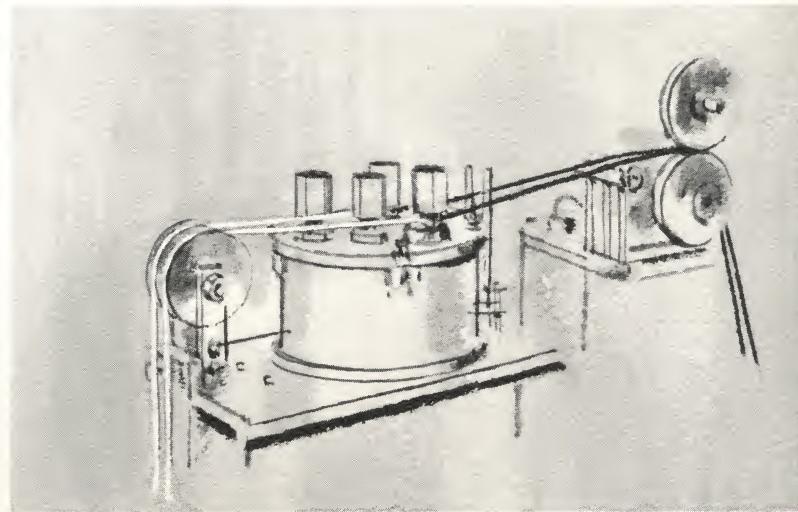
WIRE CODING INK

application methods



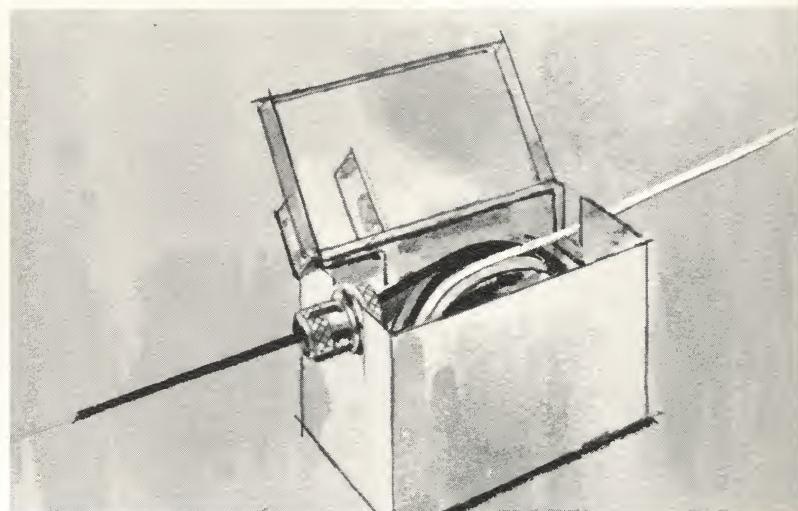
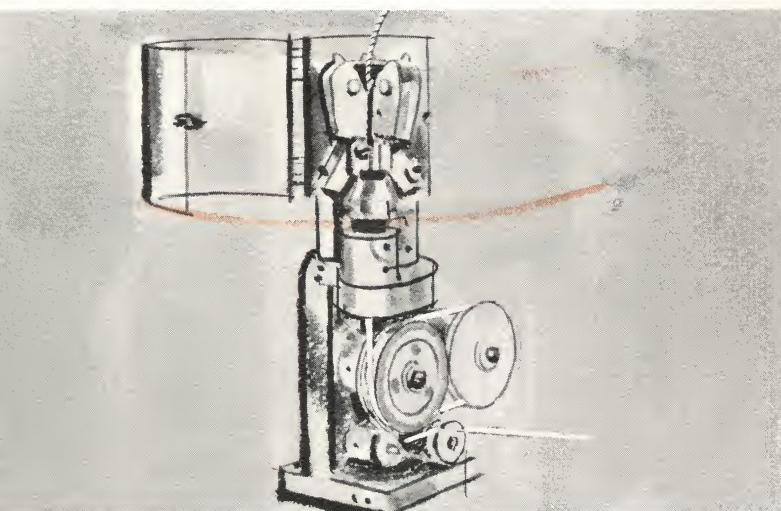
PORTABLE WICK APPLICATOR — a single notched wick protruding from container of wire coding ink over which a length of wire is drawn.

SPIRAL STRIPING — Formulabs Instant Drying Wire Coding Inks may be used with production devices such as the spiral marking machine built by *Entwistle Manufacturing Co.



PRODUCTION WICK APPLICATOR — two diametrically opposed wicks feed coding ink to the natural colored insulated wire which is drawn through the wicks.

IMMERSION APPLICATOR — the wire is guided over idler pulleys into the coding ink and out through a plastic or felt wiper. Available from *Entwistle Manufacturing Co.



*Entwistle Manufacturing Company, 1479 Elmwood Ave., Cranston, Rhode Island

FORMULABS INDUSTRIAL INKS, INCORPORATED

529 WEST FOURTH AVENUE

• ESCRONDIDO, CALIFORNIA

• SHERWOOD 5-6423

ALSO MFD. BY FORMULABS DE MEXICO, MEXICO CITY, MEXICO • ROSENDHALS, FILIPSTAD, SWEDEN • SCRIBAL, MELBOURNE, AUSTRALIA

Formulabs Industrial Inks Incorporated

P. O. BOX 1056 • ESCONDIDO, CALIFORNIA, 92026 • Phone (714) 745-6423

FORMULABS DE MEXICO, MEXICO CITY, MEXICO
ROSENDALHS FILIPSTAD, SWEDEN • SCRIBAL, MELBOURNE, AUSTRALIA



June 7, 1966

Box 1546
Poughkeepsie, N. Y.

Gentlemen:

Attention: T. Nelson

In reply to your recent inquiry for FORMULABS Wire Coding Inks and Applicator Equipment, we are pleased to enclose copies of our Wire Coding Ink brochure, ink price list and catalogue sheet for applicator equipment. You will find that the Wire Coding Ink brochure describes in some detail the various applications of our Wire Coding Ink in coloring new wire as well as salvaging obsolescent wire by converting it to colors in current use.

Wire Coding Inks can be applied to a wide range of wire sizes and when applied to PVC insulation, drying is instantaneous upon leaving the applicator.

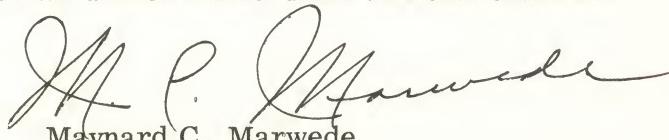
In the case of more exotic insulations, such as nylon jacketed teflon, etc., a brief application of heat is required to properly set the ink.

With regard to spiral striping, the S-Series of Wire Coding Inks can be used satisfactorily in most currently available spiral striping machines such as Nashoba and Entwistle. Again, in the case of striping PVC, no heat application is required; however, heat is required for the other exotic insulations.

If, after examining the accompanying literature, you would like to have a demonstration of the Wire Coding Ink concept, with applicator equipment placed in your production line, please contact us. We will arrange to have our representative call at your convenience. Meanwhile, if we can supply any further information, please do not hesitate to call on us. Thank you for your interest in FORMULABS products.

Very truly yours,

FORMULABS INDUSTRIAL INKS INCORPORATED


Maynard C. Marwede
Marketing Manager

MCM:hhs
Enclosures

Formulabs Industrial Inks Incorporated

IMMERSION APPLICATOR

FOR FORMULABS INDUSTRIAL WIRE CODING INKS

FORMULABS INDUSTRIAL WIRE CODING INKS (See Ink Brochure for complete details) for use on PVC, Nylon Jacketed, Polyolefin, or Glass/Cloth Braid insulated wire, when applied with Formulabs Immersion Applicator, permits all wire users and wire mills to:

- Reduce Inventory Size and Investment.
- Reduce Purchasing Costs (Through less frequent - larger quantity orders).
- Eliminate Obsolescence and Waste.
- Increase Production Flexibility.
- Eliminate Delivery Delays.

FORMULABS IMMERSION APPLICATOR WAS especially designed for the solid color coding of wire in conjunction with a cutting and stripping operation, or as an independent secondary operation. MARK II Applicator available for single wire coding; MARK III for dual leads in parallel; MARK IV for large wire up to 3/8" O.D.; MARK II-T for vertical wire exit through top.

. . . PROVIDES COLOR CODING AS NEEDED FROM A SINGLE INVENTORY OF WHITE WIRE.

- No drying tower or extensive drying equipment.
- No special work area.
- Immediate color changeover for long or short runs.
- Practically no capital equipment investment.

FORMULABS "COST-CUTTING" IMMERSION APPLICATOR IS:

Precision built throughout for smooth, maintenance free operation.

Adaptable to any work area -- minimum space requirement (Figure 3).

Completely self-contained with automatic - level ink feed, assuring uniform color.

Ruggedly constructed according to "production line" design.

Figure 1

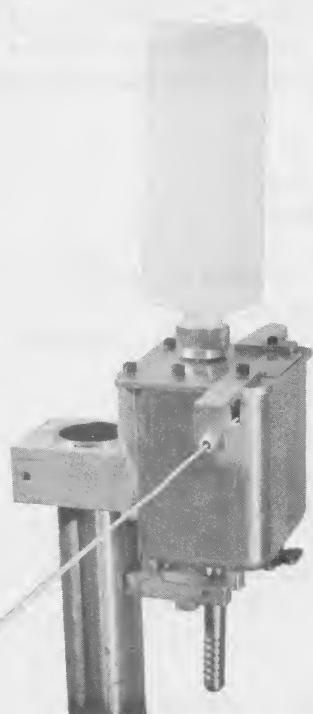
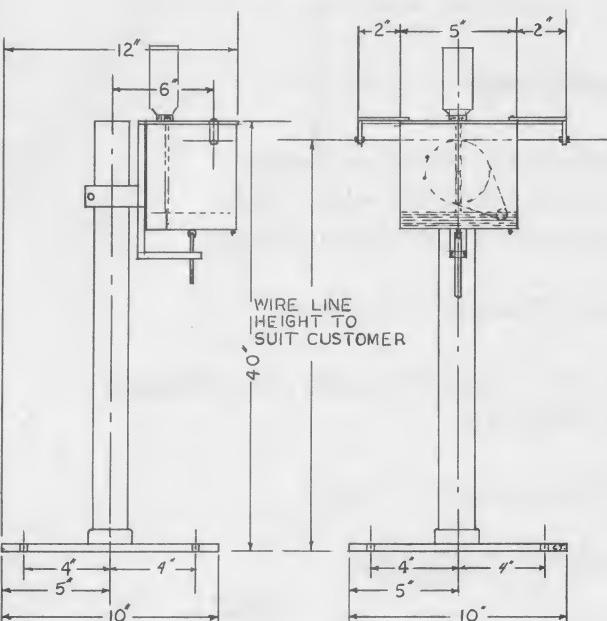


Figure 2

- Both left and right hand feeds available

- Speeds up to 500 feet per minute.



Installation Dimensions

Figure 3

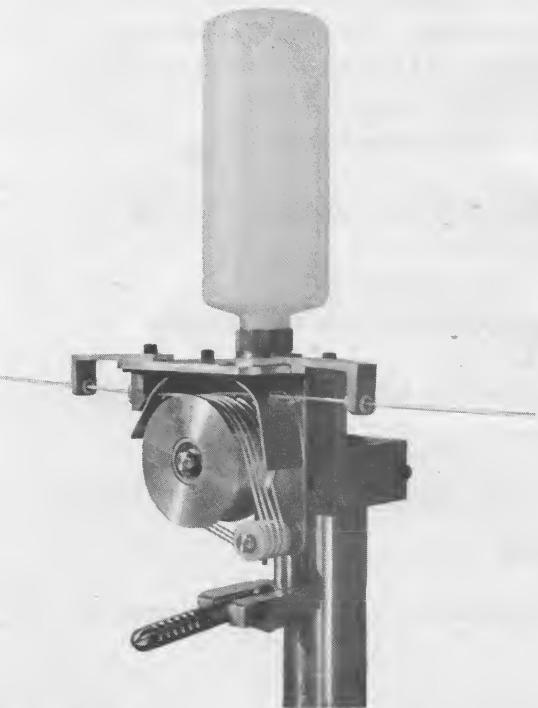


Figure 4

Immediate Delivery F. O. B. Escondido, California - Terms: Net 30 days.

- Drop Tank - completely removes wire from ink during short, temporary stops (Figure 2).

- Special Wipers tailored for your specific requirements.

- Designed for rapid cleanup.

- Variable immersion gives one to four "passes" through ink for optimum color control at a variety of speeds (Figure 4).

FORMULABS IMMERSION APPLICATOR AND ACCESSORIES:

Standard Applicator - MARK II R (Right to Left Feed)

MARK II L (Left to Right Feed) MARK II T (Wire exit from top)- W/O Pedestal - Wire Sizes 30 AWG to 14 AWG.

\$173.00

MARK III - Dual Parallel Lead

(Left hand only) W/O Pedestal

\$194.00

MARK IV - Jumbo Size - for wire up to 3/8"

O. D. (Left hand only W/O Pedestal

\$235.00

Unless order specifies otherwise, machine will run left to right.

Pedestal to fit all applicators.

\$ 16.00

One dozen rubber wipers, assorted sizes, included with each applicator.

Additional rubber wipers:

Standard MARK II and MARK III wipers (specify hole size - .025, .062, .093 and .115).

\$ 1.40 doz.

Jumbo MARK IV wipers (specify hole size - .150, .210, .275 and .340).

\$ 2.25 doz.

Extra one quart ink bottles.

\$.40 ea.

Felt backing Pads #69 for Standard Size

Wipers

\$.35 doz.

Felt backing Pads #74 for Jumbo Wipers.

\$.70 doz.

Special felt wipers for use with Nylon, Polyolefin, Glass or Cloth Braided insulated wires:

Standard MARK II and MARK III (specify hole size - 1/8, 5/32, 3/16 and 7/32)

\$.65 doz.

Jumbo MARK IV (specify hole size - 3/16, 1/4, 3/8 and 7/16).

\$ 1.50 doz.

Squeeze Bottles with Spouts.

\$.85 ea.

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FORMULABS DE MEXICO, MEXICO CITY, MEXICO
ROSENDALHS FILIPSTAD, SWEDEN • SCRIBAL, MELBOURNE, AUSTRALIA



June 7, 1966

Box 1546
Poughkeepsie, N. Y.

Gentlemen:

Attention: T. Nelson

Numerous inquiries which we have received have indicated interest in our various Wire Coding Ink "packages". In this regard, we are pleased to quote you as follows:

	MARK II	MARK III-DUAL	MARK IV-JUMBO
One Immersion Applicator	\$173.00	\$194.00	\$235.00
One Pedestal	16.00	16.00	16.00
Ten Gallons assorted Wire Coding			
Ink Colors @ \$15.00 Each	<u>150.00</u>	<u>150.00</u>	<u>150.00</u>
	\$339.00	\$360.00	\$401.00

The Immersion Applicator comes complete with the necessary wipers, cleaning apparatus, and one gallon each of Wire Coding Ink Extender and Solvent Cleaner.

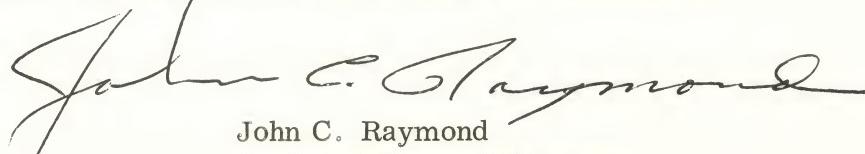
The above can be effectively utilized as stand-by equipment performing an insurance function, or as an integral part of your wire processing procedures, enabling you to have instantaneous colors as you need them from a white wire stock only.

Coverage costs are approximately ten cents per one thousand feet on 20 and/or 18 gauge wire.

If we may be of any further assistance, please do not hesitate to contact us. We certainly appreciate your interest in our color coding ink concept.

Very truly yours,

FORMULABS INDUSTRIAL INKS INCORPORATED


John C. Raymond
Assistant General Manager

JCR/mb

Suppliers To The World Of The Finest Special Purpose Inks

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WIRE CODING INKS

As a leading worldwide producer of specialty inks, Formulabs Industrial is gratified to offer production proven formulations specifically developed to simplify the manufacture of electrical devices and equipment through on-the-job color coding of white wire.

Following are prices and quantity discounts on total order of:

	<u>Gallons</u>	<u>Quarts</u>	<u>Pints</u>	<u>Half-Pints</u>
1 to 9 gallons	16.00	10.00	7.50	4.00
10 to 99 "	15.00	9.50	6.00	3.50
100 gallons + (Packaged in 1 gallon metal cans or 5 gallon steel pails)		-	14.50 per gallon	
100 gallons + (Packaged in 50 gallon steel drums)	-		13.75 per gallon	
Extender	5.00	3.00		
Solvent Cleaner #4	2.50	1.50		

F. O. B. your plant on orders totaling over 50 gallons.

NOTE: When ordering, indicate type of wire being coded -

- | | |
|--------------------------------|---------------------------------------|
| 1 - PVC or Neoprene (R Series) | 3 - Polyolefin (P Series) |
| 2 - Nylon Jacketed (N Series) | 4 - Glass or Cloth Braided (G Series) |

Terms - 2% 10 days after receipt of merchandise, net 30 days.

SEE REVERSE SIDE FOR COMPLETE COLOR INDEX

Suppliers To The World Of The Finest Special Purpose Inks

"R" SERIES

° Pink	R-71	° Lt. Blue	R-81 *
° Lt. Red	R-62	Dk. Blue	R-44
° Red	R-63 *	° Dk. Purple	R-50 *
° Lt. Orange	R-46 *	° Lt. Purple	R-70 *
° Orange	R-64 *	Gray	R-79 *
° Yellow	R-54 *	° Dk. Gray	R-77
° Lt. Green	R-66	° Lt. Brown	R-75 *
° Green	R-67 *	° Brown	R-52 *
Dk. Green	R-78 *	Black	R-53 *
Extender	R-3	Solvent Cleaner	No. 4

"N" SERIES

° Brown	N-1 *	Blue	N-6 *
° Red	N-2 *	° Blue	N-61
° Orange	N-3 *	° Violet	N-7 *
° Yellow	N-4 *	° Gray	N-8 *
° Green	N-5 *	° Black	N-0 *
Extender	N-91	Solvent Cleaner	No. 4

"P" SERIES

° Brown	P-1 *	Blue	P-6 *
° Red	P-2 *	° Blue	P-61
° Orange	P-3 *	° Violet	P-7 *
° Yellow	P-4 *	° Gray	P-8 *
° Green	P-5 *	° Black	P-0 *
Extender	P-90	Solvent Cleaner	No. 4

"G" SERIES

° Pink	G-71	° Lt. Blue	G-81 *
° Lt. Red	G-62	Dk. Blue	G-44
° Red	G-63 *	° Purple Dk.	G-50 *
° Lt. Orange	G-46 *	° Lt. Purple	G-70 *
° Orange	G-64 *	Gray	G-79 *
° Yellow	G-54 *	° Dk. Gray	G-77
° Lt. Green	G-66	° Lt. Brown	G-75 *
° Green	G-67 *	° Brown	G-52 *
Dk. Green	G-78 *	Black	G-53 *
Extender	G-3	Solvent Cleaner	No. 4

° - Conforms to MIL STD. 104

* - Conforms to RETMA Gen. 101 A.